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#### **ABSTRACT**

This study was a followup to previous block scheduling studies done at a small city school system in southwestern Ohio. It explored student perceptions of, and attitudes about, block scheduling after the fourth year of implementation. Two surveys were developed. The Phase One survey was a questionnaire designed to collect data that could be analyzed statistically. The Phase Two Survey was an eight-item free response survey. This paper deals with the results of the Phase One survey and the statistical analysis of those data. Students "agree" (4 on the scale) on 8 of the first 11 items as being benefits of block scheduling: more total learning time, more time to learn concepts better, more opportunities to work with other students, more individual help from teachers, the ability to finish homework in class more often, better grades, more time to prepare for tests, and liking for the schedule. A detailed analysis is provided, with a discussion of statistically significant differences related to gender, grade level, or level of difficulty of student course work. The questionnaire is attached. (Contains 12 figures and 22 references.) (SLD)



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### A Quantitative Look at Student Attitudes/Perceptions

### **About Block Scheduling**

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#### **Abstract**

This is a follow-up study to previous block scheduling studies done at a small city school system in southwestern Ohio. It explores student perceptions of, and attitudes about, block scheduling after the fourth year of implementation. Two surveys were developed. The Phase One survey was a questionnaire designed to collect data which could be statistically analyzed. The Phase Two survey was an eight-item free response survey. This paper deals with the results of the Phase One survey and the statistical analysis of that data.

Students "Agree" (4 on the scale) on eight of the first eleven items as being benefits of block scheduling: more total learning time, more time to learn concepts better, more opportunities to work with other students, more individual help from teachers, could finish homework in class more often, were getting better grades, had more time to prepare for tests, and generally liked block scheduling.

On the final 14 items about teaching methods, students cited "handout assignments/seat work" as "Very Often Used." Cited as "Often Used" were: lecture, group work/cooperative learning, individual projects/papers, large group discussions, and only 2-3 activities per class.

A detailed data analysis will be discussed during the session, including a discussion of statistically significant (p < .05) differences related to gender, grade level, or level of difficulty of student course work.



#### Objectives/Goals/Purposes

The author was employed as a teacher at this high school when block scheduling was initially proposed. Students were given a chance to have input but their role in making the decision to go to block scheduling was minimal, at best. When it was actually implemented there wasn't much serious attention paid to student attitudes towards the new daily structure.

This study's major purpose was to look at student perceptions of, and attitudes about, block scheduling and surveying them on the teaching methods there teachers use to determine if there were any differences that could be attributable to gender, grade level, or course difficulty.

### Perspectives/Theoretical Framework

When block scheduling was initially discussed at this school, little attention was directed towards student attitudes about how restructuring the school day would be accepted by them. It was assumed that the administration and faculty knew best how to educate students and that if these two groups decided it would be beneficial, students would be "brought on board" at a time closer to implementation of the change. Subsequent discussion focused primarily on the concerns voiced by the faculty and student input was minimal.

Other studies, notably one by the Appalachia Educational Lab (1997), have reported similar lack of attention to students as stakeholders in educational restructuring. In their study of four states (Kentucky, Tennessee, Virginia, and West Virginia) they cite students as having concerns about grading, sports activities, computer access and literacy, and a lack of voice in school policy decisions.

Calvery, Sheets, and Bell (1999) found that students' initial low perceptions about block scheduling improved during the second year of implementation, believing it offered them a greater variety of teaching and learning methods, more meaningful use of class time, and adequate or more individual attention from teachers. This study also cited student perceptions that there were problems with learners' time between courses and less forgiveness of student absences.



The Chesapeake Public Schools in Virginia (1996) reported student concerns about scheduling of advanced placement courses and ways of helping transfer students adjust to the new schedule.

A study by Davis-Willy and Cozart (1996) cited student concerns about the faster pace of learning in a fast-paced abbreviated period of time on long-term retention of content. Fletcher (1997) reported student perceptions that block scheduling led to improvements in school climate and grades, as well as the perception of greater opportunities for in-depth study of subject matter. Incidentally, his study showed no significant effect on attendance. Similar results were reported by Mutter (1997) except that he reported improved attendance after the move to block scheduling. He also cited difficulties with accommodating advanced placement and music classes. Snyder (1992) in a study of Angola High School in Indiana, had also cited increase attendance levels, along with increases in various standards of achievement (improvement in school-wide GPAs and semester exam grades, 8% increase in honor roll percentage, and improved ACT, Indiana State Proficiency Exam, and SAT scores)

Hurley (1997) reported students overwhelmingly favoring the move to block scheduling, citing as advantages improved grades, being able to participate more in school clubs, less homework and accumulating credits faster, thus allowing them to graduate a half-year early. They cited as disadvantages, the greater class length, uneven schedules (too many "hard" subjects one semester, too many "easy" ones the next), course sequencing, and difficulty of getting make-up work done after an absence. Wilson and Stokes (2000) reported similar results.

Kramer (1997) reported block scheduling brought about a calmer school environment, better discipline, and overall increases in positive attitudes in the students. Liu and Dye (1998) reported that 65 % of students (N=481) had a positive attitude about block scheduling one year after implementation, 75% agreed or strongly agreed they had more learning time on the new schedule, 62% felt they had more time to work with other students, 54% said they received more help from their teachers, and 53% reported themselves to be more actively involved in their learning. Similarly,



Pisapia and Westfall (1997) reported student satisfaction (N=2430) with increased numbers of course offerings, more group instruction use by teachers, and increased use of portfolios as an evaluation tool. Salvaterra, Lare, Gnall, and Adams (1999) reported that graduates of two Pennsylvania high schools between the years of 1995 through 1997 felt that block scheduling had adequately prepared them for college.

Thomas and O'Connell (1997) did a study of the third year after implementation of block scheduling and reported students as having seen little difference in the amount of homework, as well as feeling more bored in the longer classes. There was no change in their perceptions of their teachers concerns for them, feeling they were as concerned before the change to block scheduling as they were after. They did find that students were more concerned about their attendance due to the greater amount of material covered in one day. They even reported students feeling more stressed after implementation of block scheduling. Students in their study reported the opportunity for more class discussion as being the major benefit from the move to block scheduling.

#### Methodology

The Phase One survey was a 25-item survey using a 1-5 Likert Scale response scheme. The first eleven items dealt with student perceptions/attitudes about block scheduling while the final fourteen items dealt with teaching methods the students' teachers were using. In addition, some of the Likert scale items used in the Liu and Dye study (1998) were also included.

Surveys were distributed in all English classes at the school in the November, 2002, just after the Thanksgiving holiday. No identification of students was sought, other than gender, grade level, or course level. Instructions were given to the teachers to announce that student names were not to be placed on the surveys and that once completed, surveys were to be placed in the provided reply envelopes by the students themselves, with no assistance from the teachers. The researcher was not present when this was done and there were no students participating who were taught by the researcher



6

before he left the school. Returned surveys were collected three weeks later, in mid-December. There were 255 Phase One surveys returned.

#### **Results and Conclusions**

Descriptive statistics reveal that students "Agree" (a 4 on the scale) on eight of the first eleven items, saying they had 1) more total learning time; 2) more time to learn concepts better; 3) more opportunities to work with other students; 4) more individual help from teachers; 5) more opportunity to complete homework in class; 6) better grades; 7) more time to prepare for tests; and 8) generally liked block scheduling. The remaining three items were "Undecided" (receiving a 4): more actively involved in learning events, enjoying classes more, and liking teachers more.

The final 14 items regarding teaching methods brought more variety of responses. The highest agreement about teaching methods "Very Often Used" (a 5 on the scale) came on the question regarding "handout assignments/seat work." Methods rated a 4 ("Often Used") were: lecture, group work/cooperative learning, individual projects/papers, large group discussions, 2-3 activities per class. Receiving 3's ("One in a While" were: "hands-on" activities/laboratory work, journaling, computers/internet, presentations, same method of instruction most of the time. Receiving rankings of 2 ("Not Often") were: field trips, guest speakers, and four or more different activities per class. No item received a ranking of 1 ("Never Used").

Students reported "handout assignments/seat work" as the most commonly used teaching methodology. Lecture, group work/cooperative learning, individual projects/papers, large group discussions and having 2-3 activities per class were rated as "Often Used." This is an improvement from data obtained in a 1999 survey of students after one semester "on the block." It is obvious that some teachers have made changes in how they teach. Of the 255 students surveyed, 214 expressed their liking of block scheduling ("Agree" and "Strongly Agree" combined).



#### **Gender Differences**

The more conservative Scheffé F-test was used to examine all items on the survey. The only significant differences (p < .05) for gender (118 male, 137 female) occurred in items 15 (group work/cooperative learning; p = -.239) and 21 (large group discussions; p = -.421). In each case female students rated the item closer to 4 ("Often used" whereas the males rated the item closer to 3.5 (between "Once in a While" and "Often Used").

#### **Grade Level Differences**

Only four item results showed significant differences (p< .05) for Grade Level.

On Item 1 (Lecturing), First-year students (N=13) averaged 4.538 while seniors (N=89) averaged 3.851, for a p = .0144. While both averages were above 3, first-year students seem to value having longer classes more than their older counterparts. This likely can be attributed to their recent exposure in junior high to much shorter class periods, while it has lost its "novelty" for seniors.

Item 16 (Individual projects/Papers) saw juniors (N=80) reporting significantly less use of individual projects or papers (p = .0077) than did seniors (N=89). Since most of the juniors in the sample were in the General English class, it might be expected that they would do fewer longer papers than the seniors, more of whom were in the College Prep English class.

Item 22 (Field Trips) ratings for first-year students (N=13) and seniors (N=89) were statistically significant (p = .0486). First-year students (at an average of 1.308 - slightly above the rating of 1 for "Never Used") reported significantly less use of field trips than did seniors, who averaged 1.919 (closer to the rating of 2 – "Not Often"). Since no other grade level was any higher than the seniors, it's pretty clear that field trips are a rarely-used teaching method at this school. In the researcher's years at this school, the reason frequently cited for not using them was problems with obtaining bus drivers during the day and lack of funds to pay them for field trips.

Item 18 (Journaling) showed significant differences in four comparisons: First-year (N=13) to juniors (N=82), p = .0019; sophomores (N=73) to juniors (N=82), p = .0001; sophomores (N=73) to



6

seniors (N=89, p = .0010); and juniors (N=82) to seniors (N=89), p = .0016. This probably reflects the relative use of journaling in English classes at those grade levels, with sophomores doing the most journaling, followed by First-year students, seniors, and juniors.

#### **Course Effect Differences**

Surveys were returned from students in Basic English level courses (N=15), General English (N=101), and from College Prep English students (N=139).

Only items 8 ("I enjoy classes more"), 10 ("I like the teachers more"), 16 ("Individual projects/papers), and 23 (Guest Speakers) showed any statistically significant differences when average ratings were compared for course level effect.

Significance (p < .05) for item 8 was noted in comparisons between Basic English and General English students (p = .0272) and between Basic and College Prep English students (p = .0049). In both cases Basic English students reported that they enjoyed their classes more, with General English and College Prep English reporting less satisfaction, although still in the 3.2 to 3.4 range ("Undecided"). This could be attributed to students in the Basic English classes now feeling less rushed to get work done, as evidenced by their higher ratings on items 4 ("receive more individual help"), 5 ("more actively involved in learning events") and 6 ("can finish assignments in class more often"). On the other hand, College Prep English students reported on items 5 and 6 that they felt less involved in class activities and were not getting homework done in class as often.

The same pattern of significance (p < .05) was noted for item 10 between Basic English and General English students (p = .0261) and between Basic English and College Prep English students (p = .0025). As before, the Basic English students reported liking their teachers more than did General or College Prep English students. This could also be tied into their perceptions associated with item 8. How students feel about the class and how much they like the teacher are usually closely related attitudes.



Significant differences (p < .05) were also obtained between ratings on item 16 between Basic English and College Prep English students (p=.0355) and between General English and College Prep English students (p = .0109). The College Prep English classes require much more writing, especially in the way of longer term papers, than do the Basic English or General English classes. The reported usage levels for this methodology can be attributed to the nature of the more advanced level of work required in the upper level English classes. It is also worth noting that students in the advanced English classes are also usually in advanced math, science, and social studies classes at the same time, further increasing their homework levels and amount of writing required.

Ratings for item 23 were also statistically significant (p < .05) between General English and College prep English students (p = .0006). Students in all three courses rated this item's usage as between 2 and 2.45 ("Not Often used"). The College Prep English students reported its use the least, followed by the Basic English students, and then the General English students, who rated it highest of the three, but still a rare event. It would be safe to say that not many guest speakers are used at this school.

#### **Educational Importance**

Many schools have adopted various forms of block scheduling, the most common being the A/B (adopted in this school), 4x4, and trimester versions. While there is evidence in the literature to support many of the claimed advantages for block scheduling (e.g. Canady & Rettig, 1995), there is also evidence that teacher attitude and insufficient professional development opportunities (Howard, 1997) and even class size (Hamdy, M., 1998) can affect its impact on student learning. Schroth and Dixon (1996) even question the effectiveness of block scheduling at increasing student understanding of the subject.

With the previous studies that documented this faculty's attitudes, pro and con, on this subject prior to adoption, and three years into study, this follow-up study shows attitudes about block scheduling from a student perspective. It shows that while many students have bought into the idea of



8

block scheduling being related to better opportunities to learn, they are also savvy enough to realize that not all of their teachers are taking advantage of block scheduling's potential.

Students are stakeholders in the school reform process. Their interests and needs, as well as their perceptions, should be actively sought and heeded. More study needs to be done on student attitudes about block scheduling and how these attitudes potentially affect its utility as an educational restructuring tool.

Towards this end, negotiations are under way for repetition of the study at a North Central Ohio high school and a Northwest Ohio high school to see if student attitudes and perceptions are similar in different school settings.



#### References

Appalachia Educational Lab (1997). Let's ask the students...Kentucky, Tennessee, and West Virginia students talk about schools and change. Washington, D.C.: Office of Educational Research and Improvement.

Bogdan, R. C. & Biklin, S. K. (1992). <u>Qualitative research for education: An introduction to theory and methods (2nd. Ed.)</u>. Boston: Allyn and Bacon.

Calvery, R., Sheets, G. and Bell, D. (1999). Modified block scheduling: As assessment of teacher's and student's perceptions. (Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Pt. Clear, AL, November 16-19, 1998). [Available ERIC Clearinghouse on Teaching and Teacher Education, ED43829].

Canady, R. & Rettig, M. (1995). <u>Block scheduling: A catalyst for change in high schools</u>, Princeton, NJ: Eye on Education, Inc.

Chesapeake Public Schools (1996). 4 x 4 block schedule evaluation. Chesapeake, VA: Office of Program Evaluation. [Available ERIC Clearinghouse on Assessment and Evaluation, ED427037].

Corley, E. (2001). Block scheduling: Three years later", (Paper presented at the Annual Meeting of the Midwestern Educational Research Association in Chicago, IL)

Corley, E. (1997). Teacher perceptions regarding block scheduling: Reactions to change", (Paper presented at the Annual Meeting of the Midwestern Educational Research Association in Chicago, IL.)

Davis-Willy, P. and Cozart, A. (1996). (Paper presented at the Annual Meeting of the Mid-South Educational research Association, Tuscaloosa, AL, November 6-8, 1996). [Available ERIC Clearinghouse on Educational Management, ED403644].



Fletcher, R. (1997). A study of block scheduling movement in six high schools in the upper cumberland region of tennessee. (Revision of a paper presented at the Annual Meeting of the Tennessee Academy of Science, Sewanee, TN, November, 1996). [Available ERIC Clearinghouse on Educational Management, ED403647].

Hamdy, M. (1998, Mar). Perceptions of teachers in south florida toward block scheduling, NASSP Bulletin, 82(596), 79-82.

Hofmann, R. (1996). Using thinking units to initiate the analysis and interpretation of textual data. (Oxford, OH: Miami University)

Howard, E. (1997, Sep). Block scheduling and advanced placement mathematics: When tradition and reform collide, American Secondary Education, 26(1), 13-16.

Hurley, J. (December, 1997). The 4 x 4 block scheduling model: What do students have to say about it? NASSP Bulletin, 81(593), 64-72.

Kramer, S. (1997). What we know about block scheduling and its effect of math instruction, part II. NASSP Bulletin, 81(March, 1997), 69-82.

Liu, J. and Dye, J. (1998). Teacher and student attitudes towards block scheduling in a rural school district. <u>American Secondary Education</u>, 26(3), 1-7.

Mutter, D. et al. (1997). Evaluation of a 4 x 4 block schedule. <u>ERS Spectrum</u>, <u>15(1)</u>, 3-8.

Pisapia, J. and Westfall, A. (1997). Alternative high school scheduling: A view from the student's desk. Richmond, VA: Metropolitan Educational research Consortium.

[Available ERIC Clearinghouse on Urban Education, ED411336].

Salvaterra, M., Lare, D., Gnall, J. and Adams, D. (1999). Block scheduling: Students' perceptions of readiness for college math, science, and foreign language. <u>American Secondary</u> <u>Education</u>, <u>27</u>(4), 13-21.

Schroth, G. & Dixon, J. (1996, Oct). The effects of block scheduling on student performance, International Journal of Educational Reform, 5(4), 472-476.



Snyder, D. (1992). 4-block scheduling: A case study of data analysis of one high school after two years. (Paper presented at the Annual Meeting of the Midwest Educational Research Association, Chicago, IL, October 15-18, 1997). [Available ERIC Clearinghouse on Educational Management, ED43829].

Thomas, C. and O'Connell, R. (1997). Student perceptions of block scheduling in a new york state public high school. (Paper presented at the Annual Meeting of the Northeastern Educational Research Association, Ellenville, NY, October 22-24, 1997). [Available ERIC Clearinghouse on Teaching and Teacher Education, ED417186].

Wilson, J. and Stokes, L. (2000). Students' perceptions of the effectiveness of block versus traditional scheduling. American Secondary Education, 28(3), 3-12.



### Phase One: Block Scheduling Survey

1.	Gender (Circle one):	Male	Female	•
2.	Class (Circle One):	Freshman	Sophomore	Junior Senior
3	Name of English class you	're taking:		

**Instructions:** For each item below, circle the one best number that best reflects your feelings. As you answer the questions in Part A, think about how block scheduling is different from the more traditional schedule you might have experienced while in middle school.

Part A. Student Perceptions/Attitudes About Block Scheduling

	Strongly			S	trongly
Item	Disagree	Disagree	Undecided	Agree	Agree
1. I have more total learning time	1	2	3	4	5
daily in my classes					
2. I have more time to learn	1	2	3	4	5
concepts better					
3. I have more opportunities to work	1	2	3	4	5
with other students.					
4. I receive more individual help	1	2	3	4	5
from teachers					
5. I am more actively involved in	1	2	3	4	5
learning events.					
6. I can finish assignments in class	1	2	3	4	5
more often					
8. I enjoy my classes more	1	2	3	4	5
9. I am getting better grades	1	2	3	4	5
10. I like the teachers more.	1	2	3	4	5
11. I have more time to prepare	1	2	3	4	5
for tests					
12. Overall, I like block scheduling	1	2	3	4	5
	_				

Part B. Teaching Methods Used By My Teachers

	received the state of the state	Never	Not	Once In	Often	Very
	Method	_Used	Often	A While	Used	Often used
13.	Lecture (notes from Overhead	1	2	3	4	5
	Projector/PowerPoint)					
14.	"Hands-on" Activities	1	2	3	4	5
	or Laboratory Work					
15.	Group work/Cooperative	1	2	3	4	5
	Learning					
16.	Individual Projects/Papers	1	2	3	4	5
17.	Hand-out Assignments/	1	2	3	4	5
	Seat Work					
18.	Journaling	1	2	3	4	5
19.	Computers/Internet	1	2	3	4	5 .
20.	Presentations	1	2	3	4	5
21.	Large Group Discussions	1	2	3	4	5
22.	Field Trips	1	2	3	4	5
23.	Guest Speakers	1	2	3	4	5
24.	Same method of instruction	1	2	3	4	5
	for the entire time					
25.	2-3 Different Activities per class	1	2	3	4	5
26.	4 or more Different Activities	1	2	3	4	5
	per class					



Figure 1: Color Coding System

Identifier	Color
General English 11	Blue
Males	Blue
General English 11	Pink
Females	TIIK
CP English 11	Orongo
Males	Orange
CP English 11	Green
Females	Orecii
CP English 12	Yellow
Males	I chow
CP English 12	Purple
Females	ruipie

Figure 2: Demographic Data Summary - Raw Counts

English Course	Freshmen		Sophomore		Juniors		Seniors		Totals
English Course	Male	Female	Male	Female	Male	Female	Male	Female	Totals
Basic	2	0	2	1	3	3	1	3	15
General	1	2	10	21	21	17	18	11	101
College Prep	4	4	13	26	15	23	28	26	139
Gender Totals	7	6	25	48	39	43	47	40	255
Class Totals		13		73	*	82		87	255

<sup>\*</sup> includes two Senior boys taking General English 11

Figure 3: Demographic Data Summary - Percentages

English Course	% All Freshmen	% All Sophomores	% All Juniors	% All Seniors	% Totals
Basic	5.12	8.82	27.27	28.57	13.76
General	4.48	39.74	63.15	64.58	40.40
College Prep	5.48	73.58	79.16	96.42	60.43
Totals	7.26	44.24	62.99	73.72	43.29



Figure 4: English Enrollment at the School

Grade Level	Basic	General	College Prep	Total
9 <sup>th</sup>	39	67	73	179
10 <sup>th</sup>	34	78	53	165
11 <sup>th</sup>	22	57	48	127
12 <sup>th</sup>	14	48	56	118
Total	109	250	230	589

Figure 5: Gender Distribution in Sample

Gender	Number	%
Male	118	46.27
Female	137	53.73
Total	255	100

Figure 6: Grade Level Counts in Sample

Grade Level	Number	%	
Freshmen	13	7.26	
Sophomores	73	44.24	
Juniors	80	62.99	
Seniors	89	75.42	
Total	255	43.29	

Figure 7: Course Counts in Sample

Course	Number	%
Basic	15	13.76
General	101	40.40
College Prep	139	60.43
Total	255	43.29



Figure 8: Frequency Counts by Item

Item	1	2	3	4	5	Total
1	2	8	19	169	57	255
2	1	15	21	142	76	255
3	5	31	48	114	57	255
4	15	41	68	95	36	255
5	8	42	93	89	22	254
6	8	25	20	104	98	255
8	15	42	89	71	37	254
9	5	23	89	91	46	254
10	14	35	112	71	23	255
11	7	24	35	101	86	253
12	4	5	31	107	107	254
13	2	21	91	105	36	255
14	4	30	111	96	14	255
15	2	20	81	119	33	255
16	1	12	68	117	57	255
17	0	6	27	100	122	255
18	5	56	86	74	33	254
19	5	46	96	66	40	243
20	2	40	113	85	14	254
21	5	26	68	101	52	252
22	100	124	24	3	2	253
23	37	142	63	10	3	255
24	7	45	94	76	29	251
25	10	49	89	92	14	254
26	42	91	85	29	5	252



Figure 9: Item Means

Item	Overall	Freshman	Sophomore	Junior	Senior
	Mean	Mean	Mean	Mean	Mean
	(n=255)	(n=13)	(n=73)	(n=82)	(n=87)
1	4.063	4.538	4.164	4.122	3.851
2	4.086	4.385	4.178	4.024	4.023
3	3.733	3.846	3.712	3.866	3.609
4	3.376	3.769	3.288	3.451	3.322
5	3.295	3.846	3.260	3.358	3.184
6	4.016	4.231	4.096	3.939	3.989
8	3.287	3.846	3.452	3.195	3.151
9	3.591	4.000	3.681	3.646	3.402
10	3.212	3.538	3.219	3.293	3.080
11	3.929	4.462	3.775	3.890	4.011
12	4.213	4.308	4.417	4.073	4.161
13	3.596	3.846	3.534	3.732	3.483
14	3.337	3.308	3.370	3.488	3.172
15	3.631	4.000	3.658	3.732	3.460
16	3.851	4.077	3.836	3.622	4.046
17	4.235	4.538	4.397	4.390	4.172
18	3.291	3.615	3.918	2.732	3.244
19	3.356	3.154	3.288	3.284	3.512
20	3.272	3.154	3.403	3.110	3.333
21	3.671	3.692	3.528	3.646	3.812
22	1.747	1.308	1.603	1.765	1.919
23	2.216	2.462	2.096	2.317	2.184
24	3.299	2.846	3.222	3.325	3.407
25	3.201	3.308	3.014	3.432	3.126
26	2.460	2.692	2.310	2.634	2.384

← Highest	← Lowest
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Note: Some n's varied slightly for some questions due to no answers being given for those questions. Overall n was ranged from 251-255; Sophomore n ranged from 80-82; Junior n ranged from 71-73; and the Senior n ranged from 86-87.



Figure 10: Scheffé Test for Gender Effect, by Item, p<.05

Item	P-value
1	.8052
2	.7266
3 _	.8248
4	.6345
5	.9373
6	.5452
8	.8005
9	.7361
10	.9199
11	.4165
12	.4163
13	.7353
14	.4373
15	.0288
16	.6150
17	.3823
18	.1313
19	.1779
20	.7077
21	.0006
22	.7793
23	.5866
24	.8693
25	.1429
26	.1070

Shaded cells denote significance, p<.05



Figure 11: Scheffé Test for Grade Level Effect, by Item, p<.05

Item	Freshman/	Freshman/	Freshman/	Sophomore/	Sophomore/	Junior/
	Sophomore	Junior	Senior	Junior	Senior	Senior
	P-Values	P-Values	P-Values	P-Values	P-Values	P-Values
1	.2248	.2451	.0144	.9992	.2425	.1515
2	.8701	.5223	.6025	.7272	.8460	.9946
3	.9735	>.9999	.9325	.8393	.9917	.6306
4	.4943	.8283	.6939	.7412	.9284	.9716
5	.1915	.3597	.1204	.9057	.9889	.7142
6	.9747	.8031	.9028	.8348	.9685	.9752
8	.6911	.2671	.1736	.6061	.3560	.9778
9	.7785	.6663	.1993	.9898	.2778	.4077
10	.7240	.8363	.4967	.9800	.9300	.7171
11	.2610	.3704	.4832	.9754	.8652	.9829
12	.9908	.8117	.9748	.1471	.5599	.8126
13	.7568	.9822	.6217	.6815	.9842	.3957
14	.9850	.9381	.9875	.9792	.6005	.3078
15	.6447	.7290	.2314	.9930	.6088	.3798
16	.8286	.3039	>.9999	.4135	.4667	.0077
17	.9781	.9469	.4950	.9945	.2789	.3724
18	.7973	.0119	.6605	<.0001	.0010	.0016
19	.9679	.9855	.6379	.9869	.5754	.3962
20	.7819	.9997	.9659	.2445	.8143	.7154
21	.9985	.9991	.9447	>.9999	.5655	.5564
22	.6112	.2551	.0486	.7201	.0823	.5233
23	.5297	.9034	.6610	.6160	.9759	.8241
24	.5291	.4389	.3093	.9963	.9264	.9760
25	.8655	.9858	.9425	.1816	.9776	.3097
26	.7604	.9981	.7240	.4649	.998	.3575

Shaded cells denote significance, p<.05



Figure 12: Scheffé Test for Course Effect, by Item, p<.05

Item	Basic/	Basic/	General/
1	General	College Prep	College Prep
	P-Values	P-Values	P-Values
1	.9931	.6919	.3119
2	.9917	.9169	.5261
3	.9989	.8258	.4966
4	.8461	.9841	.6970
5	.9239	.7839	.8324
6	.4774	.9089	.1646
8	.0272	.0049	.5342
9	.4208	.0632	.1095
10	.0261	.0025	.3227
11	.3257	.5727	.6193
12	.8301	.9908	.6028
13	.4179	.1148	.3093
14	.0566	.2677	.2306
15	.1728	.3579	.6103
16	.5379	.0355	.0109
17	.5336	.8785	.4228
18	.8260	.8834	.0672
19	.8724	.9837	.7674
20	.6926	.6818	>.9999
21	.8869	.9096	.1558
22	.9996	.9570	.8580
23	.5805	.7115	.0006
24	.7461	.5533	.8152
25	.7503	.9174	.7602
26	.9983	.9750	.8410

Shaded cells denote significance, p<.05

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